



DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
BOARD AND CODE ADMINISTRATION DIVISION

NOTICE OF ACCEPTANCE (NOA)

MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION

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GAF

1361 Alps Road
Wayne, NJ 07470

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER - Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code including the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: GAF EverGuard® TPO Single Ply Roofing Systems over Wood Decks.

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA revises NOA No. 11-1201.05 and consists of pages 1 through 12.

The submitted documentation was reviewed by Juan E. Collao, R.A.



NOA No.: 13-0603.08
Expiration Date: 09/22/15
Approval Date: 08/01/13
Page 1 of 12

ROOFING SYSTEM APPROVAL

Category: Roofing
Sub-Category: Single Ply Roofing
Material: TPO
Deck Type: Wood
Maximum Design Pressure: -220 psf

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
EverGuard® TPO	Various	ASTM D 6878 TAS 131	Thermoplastic olefin reinforced membrane.
EverGuard® Extreme TPO	Various	ASTM D6878 TAS 131	Thermoplastic Olefin reinforced membrane.
EverGuard® TPO FB Ultra	Various	ASTM D 6878 TAS 131	Thermoplastic olefin reinforced, fleece-backed membrane.
EverGuard® TPO Coated Metal	4' x 10' sheets	Proprietary	24 gauge steel with 25 mil thick TPO membrane film.
EverGuard® TPO Cover Tape	6" x 100'	Proprietary	30 mil TPO membrane laminated to white butyl tape.
EverGuard® TPO Detailing Membrane	24" x 50'	Proprietary	55 mil thick reinforced TPO membrane.
EverGuard® TPO Flashing Membrane	Various	Proprietary	Reinforced flashing membrane.
EverGuard® TPO Pourable Sealer Pocket	9" x 6" x 4" oval with 3" base flange	Proprietary	Pourable sealer pocket is molded with TPO compound to a nominal 70 mil thickness.
EverGuard® RTA TPO (Roof Transition Anchor) Strip™	6" x 100' roll	Proprietary	Reinforced TPO membrane with pressure sensitive adhesive.
EverGuard® TPO Split Pipe Boot	Various	Proprietary	45 mil thick reinforced TPO membrane split to accommodate most common pipes and conduits.
EverGuard® TPO Square Tube Wrap	Various	Proprietary	Square tube wraps are fabricated from 45 mil thick reinforced TPO membrane.
EverGuard® TPO Corner Curb Wrap	Various	Proprietary	Corners are fabricated from 45 mil thick reinforced TPO membrane.



<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
EverGuard® TPO Scupper	Various	Proprietary	TPO coated metal 55 mil unreinforced membrane.
EverGuard® TPO T-Joint Cover Patch	100 patches per box	Proprietary	55 mil thick unreinforced membrane.
EverGuard® TPO Vent	2 vents per carton	Proprietary	Vent manufactured out of reinforced 45 mil TPO membrane and galvanized steel.
EverGuard® TPO T-Top Vent	4" or 6"	Proprietary	Vent manufactured out of reinforced 45 mil TPO membrane and galvanized steel.
EverGuard® TPO Walkway Rolls	Rolls 1/8"x30"x50'	Proprietary	Standard duty walkway rolls.
EverGuard® TPO Inside Corner	6" x 6" x 5 1/4"	Proprietary	Inside corners of base and curb flashings.
EverGuard® TPO Universal Corners	Various	Proprietary	The universal style corner accommodates both inside and outside corners of base and curb flashings.
EverGuard® TPO Vent Boot	1" - 6" o.d. 6 pcs. Crtn.	Proprietary	Vent pipe boots.
EverGuard® TPO Expansion Joint Cover	Various	Proprietary	60 mil thick TPO reinforced membrane, heat weldable, joint cover.
EverGuard® TPO Fluted Corner	8" diameter nominal .05" non-reinforced	Proprietary	Flashing outside corners of base and curb flashing.
EverGuard® TPO Cut Edge Sealant	1 quart squeeze tube	Proprietary	Solvent based sealant for TPO cut edges.
EverGuard® TPO Drain	Various	Proprietary	Spun aluminum drain preflashed with 55 mil. unreinforced TPO membrane.
EverGuard® TPO Seam Cleaner	1 gallon	Proprietary	Solvent-based seam cleaner
EverGuard® TPO Standing Seam Tape	6"	Proprietary	TPO white cover tape.
EverGuard® 1121 Bonding Adhesive	5 gallons	Proprietary	Adhesive for fully adhered systems and membrane flashing.

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
GAFGLAS® Stratavent® Eliminator™ Nailable Venting Base Sheet	39.37" (1 meter) Wide	ASTM D4897	A nailable, fiberglass base sheet coated on both sides with asphalt. Surfaced on the bottom side with mineral granules embedded in asphaltic coating.
GAFGLAS® #80 Ultima™ Base Sheet	39.37" (1 meter) wide	ASTM D4601	Type II, asphalt impregnated and coated, glass mat base sheet
Ruberoid® 20	39.37" (1 meter) wide	ASTM D 6163	SBS modified asphalt base sheet reinforce with a glass fiber mat.
Ruberoid® Mop Smooth 1.5	39.37" (1 meter) wide	ASTM D-6164	Non-woven polyester mat coated with polymer-modified asphalt and smooth surfaced base sheet.
FireOut™ Fire Barrier Coating	5 or 55 gallons	ASTM D6083	Low VOC, water-based coating system that provides outstanding flame spread and penetration protection to combustible roof decks in the event of fire.
VersaShield Fire Resistant Roof Deck Protection	42" (1 meter) wide	ASTM D226 ASTM D146	Fire resistant underlayment.

APPROVED INSULATIONS:

TABLE 2

<u>Product Name</u>	<u>Product Description</u>	<u>Manufacturer (With Current NOA)</u>
EnergyGuard™ Polyiso Insulation	Polyisocyanurate foam insulation	GAF
EnergyGuard™ RA Polyiso Insulation	Polyisocyanurate foam insulation	GAF
EnergyGuard™ RH Polyiso Insulation	Polyisocyanurate foam insulation	GAF
EnergyGuard™ RM Polyiso Insulation	Polyisocyanurate foam insulation	GAF
EnergyGuard™ RN Polyiso Insulation	Polyisocyanurate foam insulation	GAF
DensDeck® Roof Board	Gypsum board	Georgia Pacific
Securock® Gypsum-Fiber Roof Board	Gypsum board	USG

APPROVED FASTENERS:

TABLE 3

<u>Fastener Number</u>	<u>Product Name</u>	<u>Product Description</u>	<u>Dimensions</u>	<u>Manufacturer (With Current NOA)</u>
1.	Drill-Tec™ #12 Fastener	Insulation fastener for steel & wood decks.	Various	GAF
2.	Drill-Tec™ #14 Fastener	Insulation fastener for wood & concrete decks.	Various	GAF
3.	Drill-Tec™ AccuTrac® Recessed Plate	Square galvalume® coated steel plate.	Plate Diameter: 3"	GAF
4.	Drill-Tec™ AccuTrac® Flat Plate	Square galvalume® coated steel plate.	Diameter: 3"	GAF
5.	Drill-Tec™ 2-3/8 in. Barbed XHD Plate	Round barbed galvalume® membrane plate.	2 3/8" round	GAF
6.	Drill-Tec™ 2 in. Barbed Steel Plate	2 in. double barbed plate.	Plate Diameter: 2 in.	GAF

EVIDENCE SUBMITTED:

<u>Test Agency/Identifier</u>	<u>Name</u>	<u>Report</u>	<u>Date</u>
Underwriters Laboratory, Inc.	03CA38009	UL 790	01/21/04
	R19254	ASTM D-226	09/13/01
Factory Mutual Research Corp.	3B9Q1.AM	FM 4470	01/08/98
	3020588	FM 4470	03/24/04
	3032856	FM 4470	11/24/08
	3023458	FM 4470	07/18/06
	3040738	FM 4470	11/16/10
	3035140	FM 4470	08/10/09
IRT-ARCON	02-005	TAS 114	01/18/01
	02-008	TAS 114	01/24/02
Atlantic & Caribbean Roof Consulting, LLC	08-022	TAS 114	04/17/08
	11-056-R1	TAS 114	05/23/12
Exterior Research & Design, L.L.C.	01509.03.04-2	TAS 114-J	03/16/04
	18029.12.02-1	TAS 131	12/06/02
Trinity-ERD	G34140.04.11-2	ASTM D 6163	04/25/11
	G31360.03.10	ASTM D 6164	03/31/10
	G34140.04.11-5	ASTM D 4897	04/25/11
	G34140.04.11-4	ASTM D 4601	04/25/11
PRI Construction Materials Technologies, LLC	GAF-306-02-01	ASTM E96	08/23/11
	GAF-289-02-01	ASTM D 6878	09/07/11
	GAF-270-02-02	ASTM D 226	11/15/11
	GAF-290-02-01	ASTM D 6878	09/21/11



APPROVED ASSEMBLIES:

Membrane Type: Single Ply, TPO

Deck Type 1I: Wood, Insulated

Deck Description: ¹⁹/₃₂" CDX Plywood nailed 6"o.c. at the field of the sheet with #8 ring shank nails and 6"o.c. at the perimeter of the sheet with #8 ring shank nails. Plywood installed over wood rafters spaced 24"o.c.

System Type C: All layers of insulation are mechanically attached to roof deck. Membrane is subsequently fully adhered to insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft ²
Securock [®] Gypsum-Fiber Roof Board Minimum 1/4" thick	1 & 4	1.33 sq./ft.

Note: All Insulation layers shall be mechanically attached with fasteners and density described above. Insulation panels listed are minimum sizes and dimensions; if larger panels are used the number of fasteners per board shall be increased maintaining the same fastener density. See Roofing Application Standard RAS 117 for fastening details.

Membrane: EverGuard[®] TPO FB Ultra is adhered to the Securock[®] Gypsum-Fiber Roof Board in an approved asphalt applied within the EVT range and at a rate of 20-25 lbs./sq. with a 3" side lap and sealed with a 2" wide heat weld.

Maximum Design Pressure: -82.5 psf, (See General Limitation #7)

Membrane Type: Single Ply, TPO

Deck Type II: Wood, Insulated

Deck Description: $1\frac{9}{32}$ " or greater plywood or wood plank

System Type D(1): Membrane mechanically attached over preliminary fastened insulation to wood deck.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Fire Barrier: DensDeck® Roof Board minimum $\frac{1}{4}$ " thick preliminary fastened to deck with 4 fasteners per board, VersaShield Fire Resistant Roof Deck Protection or FireOut™ Fire Barrier Coating applied per manufacturer instructions.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft ²
DensDeck®, Securock® Gypsum-Fiber Roof Board Minimum $\frac{1}{4}$ " thick	N/A	N/A

Note: Insulation layer above shall be mechanically attached with preliminary fastening. All Insulation panels shall be mechanically fastened along with the roof membrane as specified below. See Roofing Application Standard RAS 117 for fastening details.

Membrane: EverGuard® TPO, EverGuard® Extreme TPO or EverGuard® TPO FB Ultra 5.0' wide mechanically attached with Drill-Tec™ #14 Fasteners and Drill-Tec™ 2-3/8 in. Barbed XHD Barbed Plates at 6" o.c. in the minimum 5" wide side lap and sealed with minimum $1\frac{3}{4}$ " wide heat welds.

Maximum Design Pressure: -45 psf, (See General Limitation #7)

Membrane Type: Single Ply, TPO

Deck Type II: Wood, Insulated

Deck Description: ¹⁹/₃₂" or greater plywood attached to structural wood supports spaced 24" o.c. using 8d common nails spaced 6" o.c. at all panel edges and intermediary supports.

System Type D(2): Membrane mechanically attached over preliminary fastened insulation to wood deck.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Fire Barrier: DensDeck® Roof Board minimum ¼" thick preliminary fastened to deck with 4 fasteners per board, VersaShield Fire Resistant Roof Deck Protection or FireOut™ Fire Barrier Coating applied per manufacturer instructions.

(optional)

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft ²
EnergyGuard™ Polyiso Insulation, EnergyGuard™ RA Polyiso Insulation, EnergyGuard™ RH Polyiso Insulation, EnergyGuard™ RN Polyiso Insulation, EnergyGuard™ RM Polyiso Insulation Minimum 1.5" thick	N/A	N/A

Note: Insulation layer above shall be mechanically attached with preliminary fastening. All Insulation panels shall be mechanically fastened along with the roof membrane as specified below. See Roofing Application Standard RAS 117 for fastening details.

Membrane: EverGuard® TPO, EverGuard® Extreme TPO or EverGuard® TPO FB Ultra mechanically fastened using Drill-Tec™ #14 Fasteners and Drill-Tec™ 2 in. Barbed Steel Plates spaced 6" o.c. in rows spaced 55" o.c. The outside 1.75" of the 5" lap is heat welded and the fasteners are centered within the remaining 3.25" lap area.

Maximum Design Pressure: -52.5 psf, (See General Limitation #7)



Membrane Type: Single Ply, TPO

Deck Type 1: Wood, Non-Insulated

Deck Description: $1\frac{9}{32}$ " or greater plywood or wood plank

System Type E(1): A mechanically attached anchor sheet with membrane fully adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Fire Barrier: DensDeck® Roof Board minimum $\frac{1}{4}$ " thick preliminary fastened to deck with 4 fasteners per board, VersaShield Fire Resistant Roof Deck Protection or FireOut™ Fire Barrier Coating applied per manufacturer instructions.
(optional)

Anchor sheet: GAFGLAS® #80 Ultima™ Base Sheet, Stratavent® Eliminator™ Nailable Venting Base Sheet, Ruberoid® 20 or Ruberoid® Mop Smooth 1.5 base sheet mechanically fastened to deck as described below.

Fastening Options: Anchor sheets attached to deck with approved minimum $1\frac{1}{4}$ " annular ring shank nails and $1\frac{5}{8}$ " tin caps at a fastener spacing of 9" o.c. at the 4" lap and in two staggered rows 9" o.c. in the field.

Membrane: EverGuard® TPO FB Ultra adhered to anchor sheet in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. with a 3" side lap and sealed with a 2" wide heat weld.

Maximum Design Pressure: -60 psf, (See General Limitation #7)

Membrane Type: Single Ply, TPO

Deck Type 1: Wood, Non-Insulated

Deck Description: $\frac{19}{32}$ " plywood nailed 6" o.c. at the field of the sheet with #8 ring shank nails and 4" o.c. at the perimeter of the sheet with #10 ring shank nails. Plywood installed over wood supports spaced 24" o.c.

System Type E(2): Membrane mechanically attached to wood deck.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Fire Barrier: DensDeck® Roof Board minimum $\frac{1}{4}$ " thick preliminary fastened to deck with 4 fasteners per board, VersaShield Fire Resistant Roof Deck Protection or FireOut™ Fire Barrier Coating applied per manufacturer instructions.
(optional)

Membrane: EverGuard® TPO, EverGuard® Extreme TPO or EverGuard® TPO FB Ultra 5.0' wide membranes mechanically fastened through the wood deck into the wood deck supports at a minimum row spacing of 48" o.c. with Drill-Tec™ #14 Fastener and 3" Drill-Tec™ AccuTrac plates spaced 6" o.c. in the minimum 5" wide side lap of the sheets followed by applying a minimum of 1½" wide heat weld.

Maximum Design Pressure: -97.5 psf, (See General Limitation #7)



GENERAL LIMITATIONS:

1. Fire classification is not part of this acceptance; refer to a current Approved Roofing Materials Directory for fire ratings of this product.
2. Insulation may be installed in multiple layers. The first layer shall be attached in compliance with Product Control Approval guidelines. All other layers shall be adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq., or mechanically attached using the fastening pattern of the top layer
3. All standard panel sizes are acceptable for mechanical attachment. When applied in approved asphalt, panel size shall be 4' x 4' maximum.
4. An overlay and/or recovery board insulation panel is required on all applications over closed cell foam insulations when the base sheet is fully mopped. If no recovery board is used the base sheet shall be applied using spot mopping with approved asphalt, 12" diameter circles, 24" o.c.; or strip mopped 8" ribbons in three rows, one at each side lap and one down the center of the sheet allowing a continuous area of ventilation. Encircling of the strips is not acceptable. A 6" break shall be placed every 12' in each ribbon to allow cross ventilation. Asphalt application of either system shall be at a minimum rate of 12 lbs./sq.

Note: Spot attached systems shall be limited to a maximum design pressure of -45 psf.

5. Fastener spacing for insulation attachment is based on a Minimum Characteristic Force (F') value of 275 lbf., as tested in compliance with Testing Application Standard TAS 105. If the fastener value, as field-tested, are below 275 lbf. insulation attachment shall not be acceptable.
6. Fastener spacing for mechanical attachment of anchor/base sheet or membrane attachment is based on a minimum fastener resistance value in conjunction with the maximum design value listed within a specific system. Should the fastener resistance be less than that required, as determined by the Building Official, a revised fastener spacing, prepared, signed and sealed by a Florida Registered Engineer, Architect, or Registered Roof Consultant may be submitted. Said revised fastener spacing shall utilize the withdrawal resistance value taken from Testing Application Standards TAS 105 and calculations in compliance with Roofing Application Standard RAS 117.
7. Perimeter and corner areas shall comply with the enhanced uplift pressure requirements of these areas. Fastener densities shall be increased for both insulation and base sheet as calculated in compliance with Roofing Application Standard RAS 117 and/or RAS 137. Calculations prepared, signed and sealed by a Florida registered Professional Engineer, Registered Architect, or Registered Roof Consultant **(When this limitation is specifically referred within this NOA, General Limitation #9 will not be applicable.)**
8. All attachment and sizing of perimeter nailers, metal profile, and/or flashing termination designs shall conform to Roofing Application Standard RAS 111 and applicable wind load requirements.
9. The maximum designed pressure limitation listed shall be applicable to all roof pressure zones (i.e. field, perimeters, and corners). Neither rational analysis, nor extrapolation shall be permitted for enhanced fastening at enhanced pressure zones (i.e. perimeters, extended corners and corners). **(When this limitation is specifically referred within this NOA, General Limitation #7 will not be applicable.)**
10. All products listed herein shall have a quality assurance audit in accordance with the Florida Building Code and Rule 9N-3 of the Florida Administrative Code.

END OF THIS ACCEPTANCE

